

Claims

1 1. A method for scrambling an analog signal, comprising:

2 a) receiving an analog signal;

3 b) converting said received analog signal into an intermediate frequency signal;

4 c) generating a gaussian pseudo-random noise signal; and

5 d) combining said intermediate frequency signal and said gaussian pseudo-

6 random noise signal.

1 2. The method according to claim 1, wherein step b) comprises converting said received

2 analog signal into a single side band intermediate frequency signal.

1 3. The method according to claim 1, wherein step c) comprises:

2 a) generating a pseudo-random noise signal based on a password;

3 b) filtering said pseudo-random noise signal; and

4 c) converting said filtered pseudo-random noise signal into a gaussian frequency

5 distribution signal.

1 4. The method according to claim 1, wherein step d) comprises combining said

2 intermediate frequency signal and said gaussian pseudo-random noise signal to form

3 a radio frequency signal.

1 5. A method for de-scrambling an analog signal, comprising:

2 a) receiving a scrambled analog signal;

3 b) converting said scrambled signal into an intermediate frequency signal;

4 c) generating a gaussian pseudo-random noise signal; and

5 d) combining said intermediate frequency signal and said gaussian pseudo-

6 random noise signal.

1 6. The method according to claim 5, wherein step b) comprises converting said

2 scrambled signal into a single side band intermediate frequency signal.

1 7. The method according to claim 5, wherein step c) comprises:

2 a) generating a pseudo-random noise signal based on a password used for said

3 scrambled signal;

4 b) filtering said pseudo-random noise signal; and

5 c) converting said filtered pseudo-random noise signal into a gaussian frequency

6 distribution signal.

1 8. The method according to claim 5, wherein step d) comprises using a frequency

2 converter to combine said intermediate frequency signal and said gaussian frequency

3 distribution signal.

1 9. A method for scrambling and de-scrambling an analog signal, comprising:

2 a) receiving said analog signal;

3 b) converting said received analog signal into an intermediate frequency signal;

4 c) generating a gaussian pseudo-random noise signal;

5 d) generating a scrambled signal based on said intermediate frequency signal and
6 said gaussian pseudo-random noise signal;

7 e) converting said scrambled signal into a second intermediate frequency signal;

8 f) generating a second gaussian pseudo-random noise signal; and

9 g) de-scrambling said scrambled signal based on said second intermediate
10 frequency signal and said gaussian pseudo-random noise signal.

1 10. The method according to claim 9, wherein step b) comprises converting said received
2 analog signal into a single side band intermediate frequency signal.

1 11. The method according to claim 9, wherein step c) comprises:

2 a) generating a pseudo-random noise signal based on a predetermined key;

3 b) filtering said pseudo-random noise signal; and

4 c) converting said filtered pseudo-random noise signal into a gaussian frequency
5 distribution signal.

1 12. The method according to claim 9, wherein step d) comprises combining said
2 intermediate frequency signal and said gaussian pseudo-random noise signal to form
3 a radio frequency signal.

1 13. The method according to claim 9, wherein step e) comprises converting said
2 scrambled signal into a second single side band intermediate frequency signal.

1 14. The method according to claim 11, wherein step f) comprises:

2 a) generating a pseudo-random noise signal based on said predetermined key;
3 b) filtering said pseudo-random noise signal; and
4 c) converting said filtered pseudo-random noise signal into a gaussian frequency
5 distribution signal.

1 15. The method according to claim 9, wherein step g) comprises using a frequency
2 converter to combine said intermediate frequency signal and said gaussian frequency
3 distribution signal.